

BUFFALO VENTILATING FANS

DISK FANS, PROPELLER FANS,
and "BABY CONOIDAL" FANS

Installation in
Pantry of a
Restaurant



Installation in
rear of one of
Huyler's Buffalo
stores.

BULLETIN NO. 262

BUFFALO FORGE COMPANY

Buffalo, N. Y.

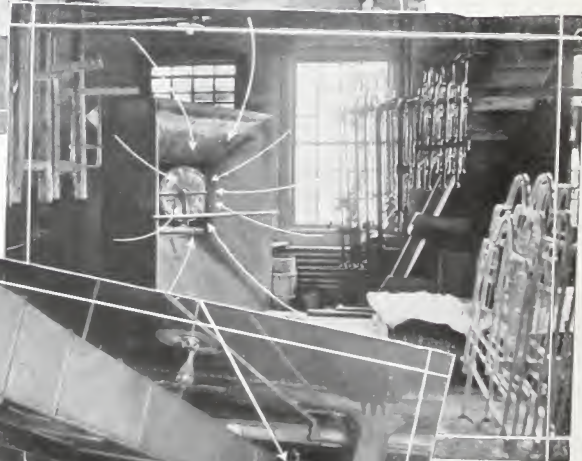
New York Philadelphia Charlotte, N. C. Pittsburgh
Detroit Chicago St. Louis Denver Los Angeles



BUFFALO FORGE COMPANY



Factory
Work Room



Finishing
Room of
Bed Manu-
facturing
Plant.



Restaurant
Kitchen

The function of a Disk Fan should not be mistaken for that of an ordinary electric fan. The latter only stirs the air—appeals to your imagination as it were, without lowering the temperature or giving

STONER & SONS
APPLIANCE CO.



BUFFALO FORGE COMPANY

Buffalo Electric Disk Fans



Electric Disk Fan.
This style made in
three sizes, viz.:
18 in., 24 in., and
30 in. listed below.

even the slightest amount of ventilation. A "Buffalo" Disk Fan gives real ventilation.

Open windows and doors are remarkably ineffective in procuring natural ventilation, because the free movement of air depends on the difference in temperature as between the inside and outside. In summer—when ventilation is needed the most—this difference is too small to be effective.

Buffalo Electric Disk Fans are of the most advanced type. The motor is secured to the frame of the disk wheel by means of a bracket on the smaller sizes and by a tripod in sizes from 36 inches and up. No floor space or supports are necessary. Just bolt the frame to an opening in the wall or in a window, connect the wires and you have the most compact and efficient ventilating system available.

In manufacturing establishments the Disk Fan can be applied with excellent results to a great variety of purposes. In the finishing rooms it removes the noxious fumes from paints, oils, varnishes and other finishing materials.

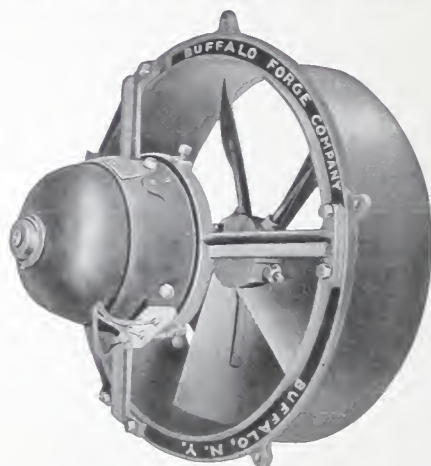
Electric Disk Fans				Direct Current		Alternating Current 1, 2, 3 phase, 60-cycle	
Size	Voltage of Motors	Cubic Ft. Air Per Minute	Approx. Weight Complete	Speed R.P.M.	List Prices	Speed R.P.M.	List Prices
18 in.	110-220	2200	125 lbs.	1000	\$ 90.00	1120	\$110.00
24 in.	110-220	4000	200 lbs.	900	112.50	850	160.00
30 in.	110-220	6200	300 lbs.	800	140.00	850	230.00

NB. Starting rheostats are not required. Larger sizes on next page.



BUFFALO FORGE COMPANY

Buffalo Electric Disk Fans



Buffalo Disk Fan with Peerless Motor. This style is made in sizes from 36 in. up.

In manufacturing processes it removes dust, lint, steam and overheated air and keeps the efficiency of the men at a high point.

In boiler and engine rooms, lavatories, etc., it removes the excessive heat and foul air better, and at less cost, than at any other device.

In hotels, restaurants, department stores, theaters, and other public places, the Disk Fan can easily be installed so as to be completely concealed, without affecting its efficiency.

In such places no more efficient remedy could be devised for the comfort of patrons and employes than the Disk Fan. Its operation is noiseless, and no attention is required except occasional oiling.

Tell us the size of the room you want to ventilate and the conditions, and we will recommend a suitable outfit.

Fitted with Direct Current Motors. General Electric or Peerless Makes.

Size	Volt of Motor	Speed R. P. M.	Cu. Ft. of Air per Min.	Weight Complete	List Price Gen. Electric	List Price Peerless
36 in.	110	525	8800	450 lbs.	\$320.00	\$300.00
	220	525	8800	450 lbs.	327.50	310.00
	500	525	8800	450 lbs.	337.50	320.00
42 in.	110	450	12000	625 lbs.	412.50	400.00
	220	450	12000	625 lbs.	425.00	410.00
	500	450	12000	625 lbs.	437.50	425.00
48 in.	110	400	18000	800 lbs.	495.00	487.50
	220	400	18000	800 lbs.	512.00	500.00
	500	400	18000	800 lbs.	525.00	512.50

Prices include starting rheostats. A speed regulator giving 50 per cent. variation, can be furnished at slight additional cost



Buffalo Electric Propeller Fans



The uses of the Buffalo Propeller fans are essentially the same as of the Disk Fans described in the foregoing pages. The propeller fans are used in preference to the latter where the space available for the fan is so small that it becomes a matter of obtaining a fan of the smallest possible dimensions.

In this respect a Buffalo Propeller Fan is unequalled. Its capacity, size for size, is from 25% to 40% greater than that of a disk fan. This higher capacity has been obtained by the peculiar propeller-like design of the blades.

The angle and curvature of the blades is correct, causing the air to pass through the fan in a direction parallel to its axis, with uniform velocity throughout the entire area. Back flow is impossible, even though the delivery is against pressure.

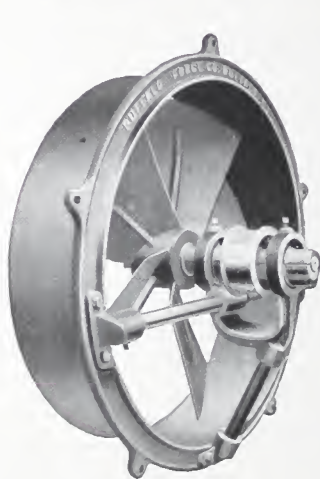
Size	Voltage of Motor	H. P. M.	Cu. Ft. of Air Per Minute	Approx. Wt. Complete	List Price (Cost, Excl. Frt.)	List Price (Frt. Inc.)
18	110	800	2500	200 lbs.	\$160.00	\$155.00
	220	800		200 lbs.	165.00	162.50
	500	800		200 lbs.	170.00	170.00
24	110	650	5120	300 lbs.	195.00	182.50
	220	650		300 lbs.	200.00	190.00
	500	650		300 lbs.	205.00	195.00
30	110	525	8100	450 lbs.	240.00	225.00
	220	525		450 lbs.	245.00	240.00
	500	525		450 lbs.	250.00	247.50
36	110	425	11350	625 lbs.	285.00	260.00
	220	425		625 lbs.	290.00	272.50
	500	425		625 lbs.	295.00	285.00



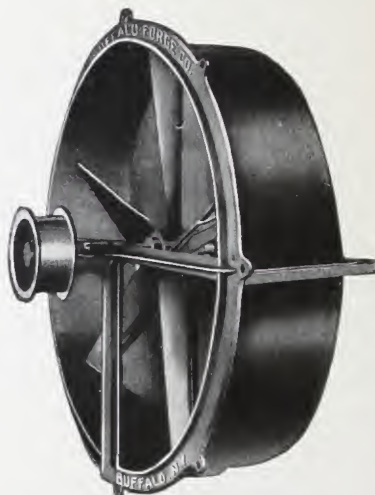
BUFFALO FORGE COMPANY

Buffalo Pulley Disk Fans

Oil Ring
Bearings



Pulley Disk Fan--bearings on one side---
made in sizes from 18" up to 48"



Pulley Disk Fan--standard bearings--made
in sizes from 54" and up.

By an ingenious system used only in the construction of the "Buffalo" fans, an exceptionally fine balance of the wheel is obtained, so that they will run at very high speeds without vibration, smoothly and noiselessly.

ALL SIZES UP TO AND INCLUDING 48-INCH DIAMETER, ARE NOW MADE WITH THE BEARINGS ON ONE SIDE ONLY.

This avoids the troublesome and dangerous practice of reaching through the fan blades to oil up.

THE BEARINGS ARE OF THE IMPROVED "BUFFALO" OIL RING TYPE, extra long, babbitted, and with oil grooves which distribute the oil evenly over the entire wearing surface.

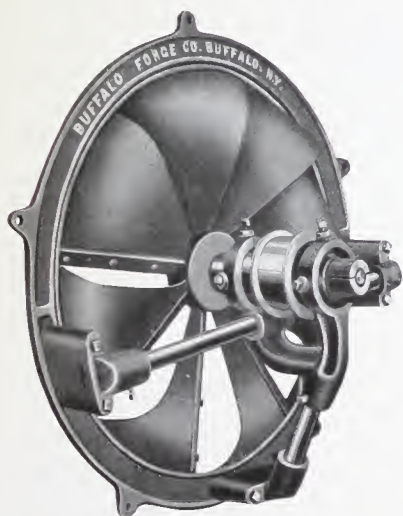
With the fan running continuously at high speeds, these bearings remain cool and require but an occasional re-oiling. The oil reservoirs are made of ample size with that end in view.

SPECIFICATIONS

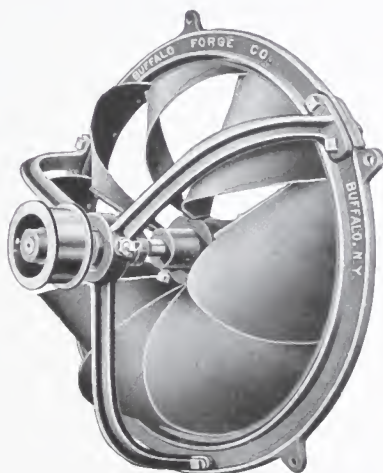
Size	Normal Speed	Cu Ft.-Air per Minute	Horse Power Required	Size of Pulley	Weight Lbs.	List Prices
18	1000	2200	0.25	2 x 4	75	\$40.00
24	800	4000	0.50	2 x 4	100	50.00
30	650	6200	0.75	2 3/4 x 6	170	65.00
36	525	8800	1.00	3 x 7	230	85.00
42	450	12000	1.50	3 1/2 x 8	325	110.00
48	400	18000	2.00	4 x 9	445	125.00
54	350	21000	2.50	4 x 9	560	175.00
60	320	25000	3.00	5 x 10	630	250.00
72	265	36000	5.00	5 1/2 x 12	820	300.00
84	227	50000	7.50	6 x 14	990	350.00



Buffalo Pulley Propeller Fan



Sizes from 18" up to 48" like this.
Bearings on one side.



Sizes from 54" and up like this.
Bearings on both sides.

The Buffalo propeller fan has a larger capacity for its size than disk fan types, and is therefore recommended where the available space is small.

The angle and curvature of the blades cause air to be delivered without the usual back draft through the center of the fan, even against maximum resistance. The important point aimed at—uniform velocity of the air over the entire area—has been gained with singular success. Perfect alignment of the blades at the outer edge and absence of vibration is secured by rigidly attaching the entire width of the broad blade at this end to the steel ring. The straight side of each vane is similarly re-enforced by a steel bar, which is fitted at each end into the hub and ring like a spoke. This gives superior strength to the fan just where it is needed.

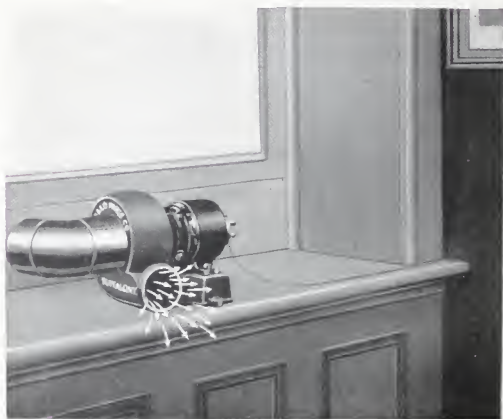
PULLEY PROPELLER FANS

Size	Normal Speed	Cu. Ft. Av. Per Minute	Horse Power Required	Size of Pulley	Approx. Weight	List Prices
18	900	3200	0.8	2 x 4	75	\$40.00
24	800	6300	1.4	2 x 4	100	50.00
30	650	10000	1.8	2½ x 6	175	65.00
36	525	14000	2.4	3 x 7	240	85.00
42	450	19300	3.2	3½ x 8	325	110.00
48	400	25200	4.	4 x 9	450	125.00
54	350	32000	5.	4 x 9	575	175.00
60	320	36000	7.20	5 x 10	640	250.00
72	265	56000	9.70	5½ x 12	825	300.00
84	226	77000	12.50	6 x 14	1000	350.00



BUFFALO FORGE COMPANY

"Baby Conoidal" Ventilating Sets

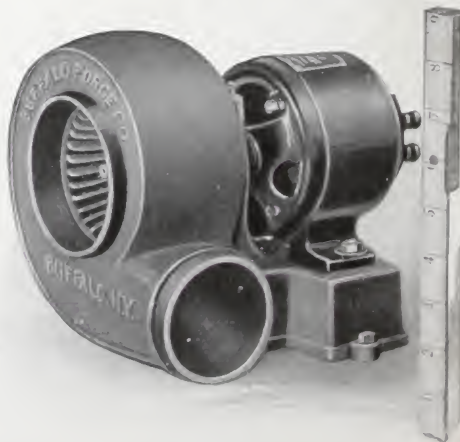


This shows a simple elbow connection which anyone can fix up, whereby fresh air is taken directly from the outside and blown into the room.

obtained where it is desired to exhaust smoke, fumes and hot air.

The relatively slow speed of the "Baby Conoidal" is one of the points which contribute to its silence; its "hum" cannot be heard except by laying your ear close up against it.

A most convenient feature is that the fan case can be swung around to discharge in any desired direction. Cord and plug are furnished free with each outfit, so that it can be attached to a lamp socket without expense for installing. All the motors are furnished for 110 or 220 volts. The A. C. motors are all single phase, 60 cycles. Give particulars about current when ordering.



Size	Capacity Air per Minute	Horse Power	Speed Rev per Minute	Weight	Height	Diam. Inlet	Diam. Outlet	List Prices	
No. 1	90 cu. ft.	$\frac{3}{8}$	1800	25 lbs	8 $\frac{1}{4}$ in.	4	3	D. C.	A. C.
No. 2	250 cu. ft.	$\frac{1}{2}$	1800	45 lbs	10 $\frac{1}{4}$ in.	5 $\frac{1}{2}$	4	\$ 60.00	\$ 60.00
No. 3	500 cu. ft.	$\frac{3}{4}$	1800	65 lbs	15 in.	7	6	75.00	90.00
								100.00	120.00